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AN EXPLORATION OF THE NASCAR FANAGE

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ABSTRACT

NASCAR as a sport has the most loyal fans. The purpose of this project was to identify potential variables that explain such loyalty. None of the coefficient of determination (r^2) were very strong. Those variables that show the most promise for characterizing the fans were those variables related to the experiential base of NASCAR.

INTRODUCTION

It is important to understand the fans in any sport because they are the basis or foundation for a sport's popularity. (12, 16) Popularity is the gate to revenues, television revenues, sponsorship, etc. The fan, in the modern sports era, may be one of the forgotten ingredients to the success of any sport. Many changes in most sports do not benefit the "common" fan. Some of the changes have been increase in ticket prices,

new venues that focus upon skyboxes, etc. One of the sports that has focused upon the fans and their position in the sport is National Association for Stock Car Auto Racing (NASCAR) (14). The fans are at the center of most considerations in the changes within this sport. The fans have supported NASCAR. (Attendance, support of sponsors products, TV and radio ratings.) In fact, it has the highest fan loyalty of any sport. Seventy-two percent of fans support the sponsor's product. Most sports have a fan loyalty level of 30% to 35% (4, 9).

Most of the decisions regarding NASCAR focus upon the fan and the competition level. This has resulted in increased popularity. Popularity is the key to greater sponsorship and greater dollars which allows for increased competition. This increased competition heightens the excitement for the fan. Other elements that create popularity are the sport's openness which allows the fan to get closer and identify with the drivers, the cars

are very similar to what fans drive, and the drivers are from a common background in terms of the fan's related experiences.

The purpose of this initial study was to examine NASCAR fans to determine the influences that make them such loyal fans during the June and August races of the 1997 season at the Michigan International Speedway. It is important to recognize that this was an exploratory study to identify important fan variables. Each venue in NASCAR is different and must be understood in terms of the general NASCAR fan psychographics and demographics. The venue selected for this study was the Michigan International Speedway. Most of the fans who attend this venue are from: Canada (especially Ontario Province), Iowa, Illinois, Wisconsin, Minnesota, Ohio, Michigan, and Indiana. There are also some fans from New York, Pennsylvania, and West Virginia as well as other distant states that represent a national audience.

This study was completed in two phases. Phase I was the spring race (June) and Phase II was the summer race (August). The June race was a pilot test for instrument development. The August race was where the primary study was conducted.

METHODS

June (Miller) Race

At the June (Miller) race, a random sample of fans was surveyed on their terminal (life's philosophy) and instrumental (ways to approach) values (Psychographic) as well as characteristics about their involvement with NASCAR and motor sports (Demographic). Previous NASCAR tracking studies were reviewed to identify potential Psychographic

and Demographic variables. One hundred and twenty-six surveys were completed by the fans and a sample was built with 86 of the questionnaires to develop a representative sample of NASCAR fans on the basis of age structure. Age was the best variable to characterize fans because it has been found to be the most stable of the demographic variables.

The purpose of this preliminary survey was to develop an instrument that could be used to better characterize the fans and their relationships, especially psychographic factors. Information was also collected on motor sports variables: fan status, participation condition, reading patterns, dollars spent, support of sponsorship, attendance and watching/listening to motor sports events, and distance traveled.

The instrument used for the examination of values was the original Rokeach instrument (3, 5, 6, 7, 8, 11). This instrument recognizes two types of values: "terminal" and "instrumental". Even though this original instrument has some faults in its original form, it has shown stability through the years in examining a population where the value structure has not been identified. The original Rokeach instrument was modified from a rank order to a four-point importance scale so as to reduce the amount of time in the administering of the instrument. This type of modification has increased its validity and reliability in use because the individual is able to make a better comparison on an item-by-item selection as opposed to a rank order. The ranking of the original Rokeach instrument involved an extensive amount of time and through the use of an importance scale, the amount of time was reduced by one-fifth in terms of data collection (15). The terminal and instrumental values were determined by using the 18 di

mensions and building an index for the terminal and the instrumental values based upon the method of summated rating.

RESULTS

A factor analysis (Principle Component and Vermax Methodologies) was completed on the terminal and instrumental values of the fans. (Table 1 and Table 2) There were four primary terminal dimensions isolated: 1) maturity, 2) loyalty, 3) immediate outcomes, and 4) stability. When a factor analysis was completed of the instrumental values, there were four factors isolated: 1) respectfulness/caring, 2) problem solving, 3) objectivity, and 4) trustworthiness.

A step-wise regression (forward) was performed with the terminal and instrumental values being the dependent variables and the NASCAR and motor sports characteristics being the independent variables. A 0.15 probability level was used to incorporate the significant variables into the step-wise forward regression analysis. The variables were also standardized so that the beta coefficients could be compared in order to directly determine the importance of the variables. When the forward step-wise regression was completed for the terminal values of the fans, the coefficient of determination (r^2) R was very low (0.1). (Table 3) The significant variables isolated were "frequency in the reading of NASCAR publications" and "support of food sponsors" by the fan. A stepwise forward regression was completed for the instrumental values. The coefficient of determination (r^2) was also weak (0.3). (Table 3) The significant variables isolated in the step-wise regression were: the number of years of being a NASCAR fan, the degree of support of food sponsors by the fan, the degree of support of beverage sponsorship by the fan, the degree of support of the res-

taurant sponsors by the fan, and the travel distance to the race.

In addition to the performing of a step-wise regression on the terminal and instrumental values, two additional dependent variables were used: dollars spent on merchandise and distance traveled to the Michigan race. These variables were selected because of their importance in the factor analyses and stepwise regressions. The coefficient of determination (r^2) for the equation for dollars spent on merchandise was 0.5 (medium strength). (Table 3) The significant variables isolated were: dollars spent on collectibles, the degree of support of tire sponsors by the fans, and the degree of support of paint and paint spray equipment by the fans. (Table 3) The coefficient of determination (r^2) for the distance traveled to the Michigan race was 0.3 (weak strength). (Table 3) The significant variables identified were: distance traveled to other races, the watching and listening of Winston Cup races by the fans, the degree of support of tire sponsors by the fans, dollars spent on merchandise and membership in a fan club. (Table 3)

METHODS

August (DeVilbiss) Race

After the initial fan survey was completed at the June (Miller) race, the terminal and instrumental values were factor analyzed and those items with the highest factor loadings for both the instrumental and terminal values were chosen to be included in a second fan survey to be conducted in August. Three hundred and twenty-six surveys were completed by the fans and a sample was built with 284 of the questionnaires to develop a representative sample of NASCAR fans on the basis of age structure. (Tables 1 & 2) The terminal and instrumental value items

were then combined into an index that reflected both instrumental and terminal values for incorporation into a cluster analysis. The terminal and instrumental value index was only one factor utilized in a cluster analysis. The other variables were the significant psychographic and demographic factors isolated. The other motor sports variables selected were: fan status, favorite driver, who introduced the fan to NASCAR, readership of NASCAR publications, amount of dollars spent on merchandise, and distance traveled to the race. (Table 4) These variables, psychographic and motor sports, were incorporated into a cluster analysis in an effort to identify two or three major fan group types and how to approach them. Only select variables were used in the cluster analysis based upon their significance in the other analyses. The strength of the variables were the primary factor in determining whether a variable was included in the study (Anderson, 1973; 8). The variables used were terminal and instrumental values, readership, amount of dollars spent on merchandise, and distance traveled to the race.

RESULTS

There were three primary groups identified through the cluster analysis. (Table 5) Group 1 consisted of those individuals who expend a large amount of money, travel a long distance and have an abiding loyalty to NASCAR. These are the individuals who consider NASCAR a religious experience and represents a lifestyle around which their lives revolve. Primary factors are involvement with NASCAR. The second group builds a lifestyle around NASCAR but it is on a seasonal or a conditional basis. The amount of dollars involved in the expense of NASCAR merchandise is not high but there is the same loyalty in regard to attendance

and watching races in support of NASCAR sponsors. These individuals are the fans who make up the backbone of NASCAR through their direct participation, even though some of their participation is passive such as in watching television and listening to the radio. The third group is made up of social fans. These are the individuals who support NASCAR events but this is their involvement usually done through some type of social connection and are there because of someone else who is an avid fan and choose to associate with that social group.

IMPLICATIONS

One of the important findings is that fans are thought to have unanimous response to sponsor's products. This is not true. It was found that fans respond to different products in a variety of ways with varying degrees of support of sponsors. This indicates that much further research is needed because it is one of the important characteristics of the NASCAR fanage to support NASCAR products. The primary question being raised is "why support is provided for certain products and not others." The primary issue is sub-grouping of NASCAR fans and the further defining of fans, in terms of such variables as on amount of dollars spent, distance traveled, and support of the sponsor's products. This type of information is needed because the relationships that were established on the psychographic variables were very weak which indicates that further data and sub-grouping is needed. More information is needed on NASCAR fanage to develop a perspective of the fan, especially upon a regional basis.

Those variables that were found significant were dollars spent upon souvenirs as well as merchandise and distance traveled to the

race. The psychographic variables were not strong but when the factor analysis was completed it was found that the NASCAR fan holds traditional values. It would seem that the primary variables on which to characterize NASCAR fans would be the type of souvenirs bought and dollars spent on merchandise, as well as the support of sponsor's products. Another very important variable is the involvement of the fan with NASCAR and at what level in terms of attending and watching/listening to races. It is important to recognize that this study was completed by individuals who attend races and that there are probably many fans who have a different type of involvement with NASCAR, especially with the radio and television. This is indicated by the results and demands a general population study of NASCAR fanage to obtain a true picture of the type of involvement of the fan with NASCAR.

There are probably many NASCAR fans that are just as involved as those fans that attend the race, but are involved in a different way, especially with the radio and television coverage that NASCAR receives. There is probably, also, a large regional difference based upon the general population. One of the primary variables that must be taken into consideration when characterizing NASCAR fans is the regional variable or location of residence.

This was an exploratory study and the results are not meant to be conclusive but only to begin to understand the NASCAR fan, especially those that attend races. But it raises more questions about who the NASCAR fans are and what the important variables are that can be used to characterize NASCAR fans.

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TABLE 1
FACTOR ANALYSIS
TERMINAL VALUES

General Fans

Terminal Values

		Maturity	Loyalty	Immediate Outcomes	Stability
1	A COMFORTABLE LIFE	.22	.23	.75*	.01
2	AN EXCITING LIFE	.19	.11	.72*	.01
3	A SENSE OF ACCOMPLISHMENT	.04	.21	.43	.69
4	A WORLD AT PEACE	.66*	.09	.00	.29
5	A WORLD OF BEAUTY	.75*	.09	.21	.01
6	EQUALITY	.74*	.17	.07	.08
7	FAMILY SECURITY	.16	.04	.09	.79*
8	FREEDOM	.06	.45	.06	.34
9	HAPPINESS	.11	.13	.56	.48
10	INNER HARMONY	.51	.45	.32	.13
11	MATURE LOVE	.43	.39	.09	.09
12	NATIONAL SECURITY	.37	.15	.02	.60
13	PLEASURE	.16	.03	.74*	.03
14	SALVATION	.67	.23	.14	.33
15	SELF-RESPECT	.23	.79*	.07	.14
16	SOCIAL RECOGNITION	.15	.59	.38	.01
17	TRUE FRIENDSHIP	.05	.78*	.12	.00
18	WISDOM	.41	.50	.22	.21

*A factor score that indicates that this element is an important contribution to the development of terminal values.

TABLE 2
FACTOR ANALYSIS
INSTRUMENTAL VALUES

General Fans

Instrumental Values

		Respectful/ Caring	Problem Solving	Objective	Truth- worthy
1	AMBITIOUS	.30	.62	.23	.28
2	BROADMINDED	.00	.26	.53*	.18
3	CAPABLE	.23	.65*	.12	.09
4	CHEERFUL	.54	.37	.02	.37
5	CLEAN	.08	.19	.03	.80*
6	COURAGEOUS	.57	.30	.13	.44
7	FORGIVING	.25	.10	.23	.78*
8	HELPFUL	.64	.13	.30	.35
9	HONEST	.25	.11	.01	.76*
10	IMAGINATIVE	.31	.64	.12	.14
11	INDEPENDENT	.08	.70*	.15	.09
12	INTELLECTUAL	.01	.41	.54	.11
13	LOGICAL	.21	.32	.58	.15
14	LOVING	.69	.05	.31	.30
15	OBEDIENT	.72	.17	.32	.09
16	POLITE	.17	.05	.79*	.14
17	RESPONSIBLE	.43	.51.	.36	.08
18	SELF-CONTROLLED	.26	.15	.70*	.00

*A factor score that indicates that this element is an important contribution to the development of instrumental values.

TABLE 3
STEPWISE REGRESSION

General Fans

Terminal Values

R-square - 0.0969

Standardized Beta Coefficient

Reading Publications
Food Exp.

0.19
0.28

INSTRUMENTAL VALUES

R-square - 0.2953

Standardized Beta Coefficient

years NASCAR fan
Food Exp.
Bev. Exp.
Rest. Exp.
Travel Dist.

0.24
0.69
-0.53
0.23
-0.31

A 0.15 probability level was used to identify significant variable to be included in the study.

TABLE 3
STEPWISE REGRESSION

General Fans

Dollar Spent/Merchandise

R-square - 0.4999

Standardized Beta Coefficient

Dollar Spent/Collectibles	0.44
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Purchase Sponsor Products/Tires	0.03
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Purchase Sponsor Products/Paint and paint spray equipment	0.03
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A 0.15 probability level was used to identify significant variable to be included in the study.

TABLE 3
STEPWISE REGRESSION

General Fans

Distance Traveled/MIS

R-square - 0.302

	Standardized Beta Coefficient
Distance Traveled to Other Races	0.12
Watch/Listen Winston Cup	0.05
Purchase Sponsor Products/Tires	0.06
Dollars Spent/Merchandise	0.04
Membership in Fan Club	0.03

A 0.15 probability level was used to identify significant variable to be included in the study.

TABLE 4

GENERAL FANS
CLUSTER ANALYSIS

Percent of Population in Group

Group 1	9.8%
Group 2	24.1%
Group 3	66.1%